

Supporting information

Chlorogenic Acid Releasing Microspheres Enhanced Electrospun Conduit to Promote Peripheral Nerve Regeneration

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Supplementary figures

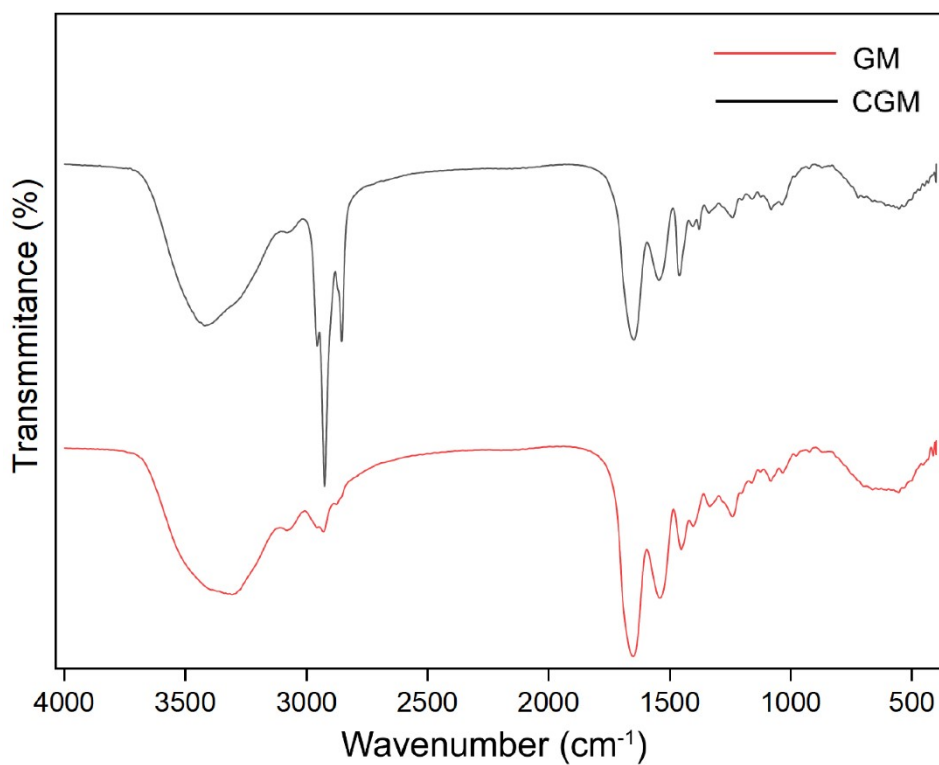
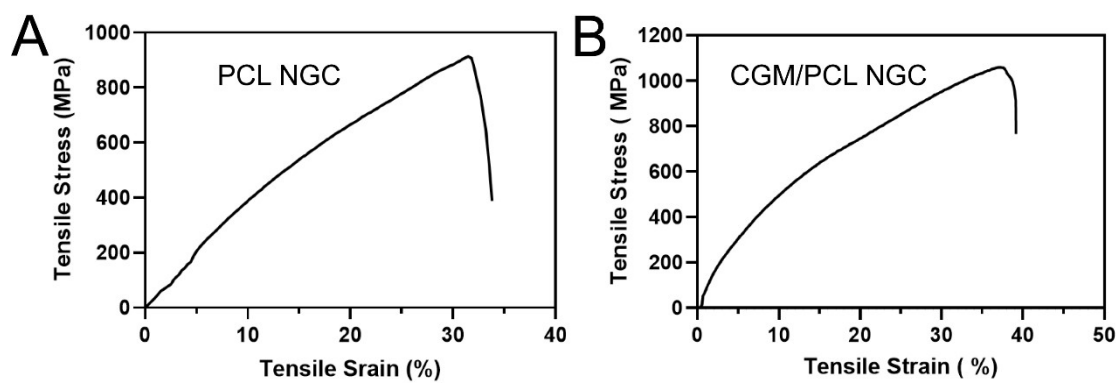


Figure S1. FTIR-ATR spectra of GM and CGM



	Hollow-PCL NGC	GM/PCL NGC	CGM/PCL NGC
Outer Diameter (mm)	2.19	2.24	2.34
Outer layer thickness (mm)	0.35	0.41	0.36
Infilling	N/A	MS	CGA-MS
Porosity (%)	80.1	81.7	83.4
Elastic modulus (MPa)	2.74	3.1	3.24

Figure S2. Stress-strain curves of PCL NGCs and summarizing table of the hollow PCL NGC, GM/PCL NGC and CGM/PCL NGC mechanical characteristics.

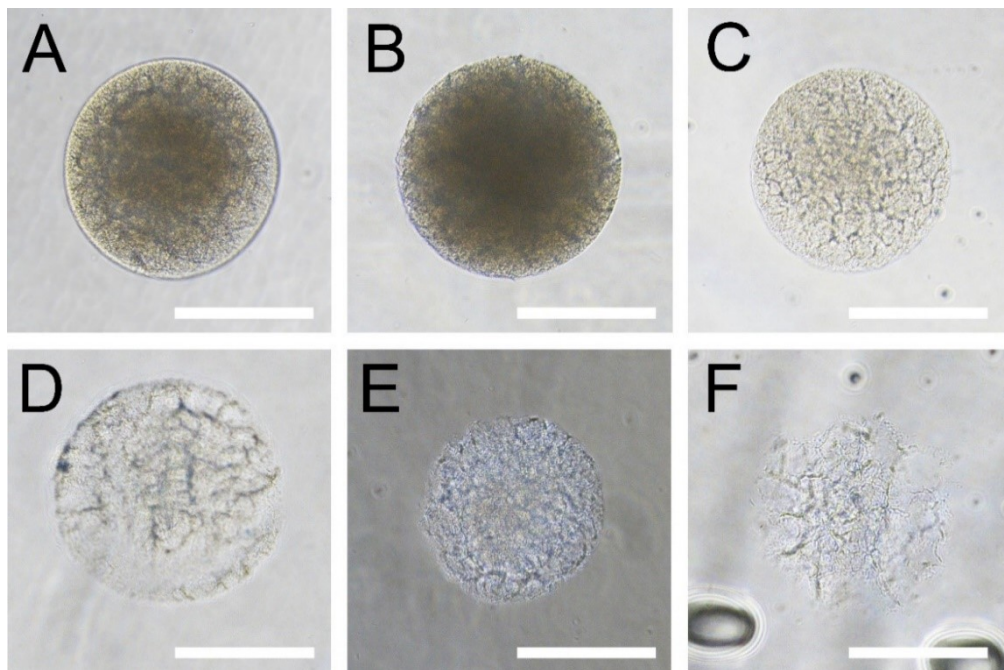


Figure S3. GM degradation process was observed after placed in PBS. GM were taken on days 1, 5, 10, 15, 18 and 28. The scale bar is 100 μm .

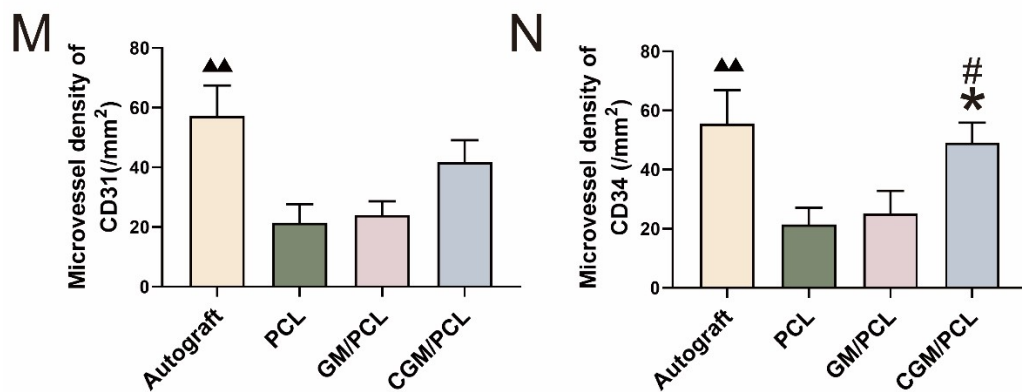
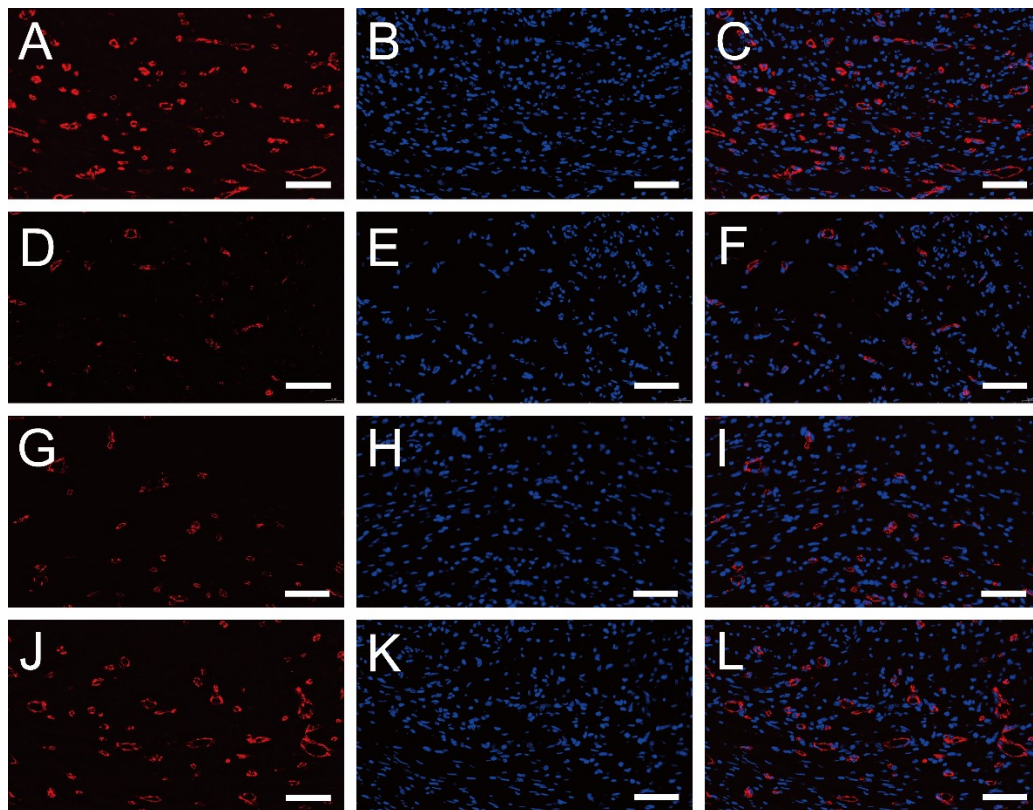


Figure S4. CD31 immunofluorescence (red) and DAPI staining (blue) 12 weeks after surgery in the autograft group (A–C), the PCL group (D–F), the GM/PCL group (G–I), and the CGM/PCL group (J–L). CD31 microvessel density was evaluated by CD31 staining (M). CD34 microvessel density was evaluated by CD34 staining (N). Experiments were repeated three times. ▲▲ represents $p < 0.01$ compared with PCL; # represents $p < 0.05$ for GM vs CGM/PCL; * represents $p < 0.05$ for PCL vs CGM/PCL; The scale bar is 50 μm .

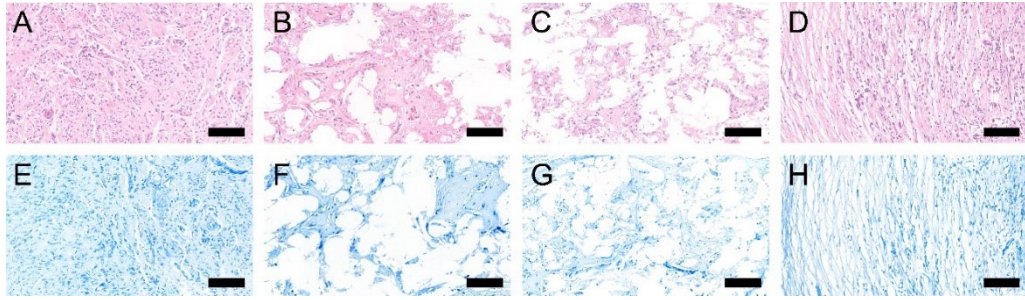


Figure S5. Twelve weeks after surgery, Toluidine blue and HE staining were performed on regenerated nerve fibers in the autograft nerve group (A, E), PCL group (B, F), GM/PCL group (C, G), and CGM/PCL group (D, H). The scale bar is 100 μm .